

**Amendments to the Claims:**

1. (Currently Amended) A method for the vitrification of human oocytes, which comprises:

- (a) placing human oocytes on a gold grid; and
- (b) placing the gold grid and the human oocytes directly into a slushed nitrogen ( $N_2$  slush), wherein the human oocytes are directly exposed to the  $N_2$  slush thereby undergoing vitrification, and ~~wherein the human oocytes are able to live for a period of time after the human oocytes are devitrified~~ wherein implantation or pregnancy rate of human oocytes after devitrification and *in vitro* fertilization is higher than implantation or pregnancy rate of human oocytes vitrified on a gold grid using liquid nitrogen.

2. (Cancelled)

3. (Previously Presented) The method according to claim 1, wherein the step (a) further comprises treating the human oocytes with a cryoprotectant prior to vitrification.

4. (Cancelled)

5. (Currently Amended) A method for the vitrification and devitrification of human oocytes, which comprises:

- (a) placing human oocytes on a gold grid;
- (b) placing the gold grid and the human oocytes directly into  $N_2$  slush, wherein the human oocytes are directly exposed to the  $N_2$  slush thereby undergoing vitrification, and wherein the human oocytes are able to live for a period of time after the human oocytes are devitrified; and
- (c) devitrifying the human oocytes which have undergone vitrification, wherein implantation or pregnancy rate of human oocytes after *in vitro* fertilization is higher than implantation or pregnancy rate of human oocytes vitrified on a gold grid using liquid nitrogen.

6. (Currently Amended) A method for the vitrification and storage of human oocytes, which comprises:

(a) placing human oocytes on a gold grid;

(b) placing the gold grid and the human oocytes directly into N<sub>2</sub> slush, wherein the human oocytes are directly exposed to the N<sub>2</sub> slush thereby undergoing vitrification, and wherein the human oocytes are able to live for a period of time after the human oocytes are devitrified;

(c) transferring the human oocytes which have undergone vitrification into a storage container, the storage container containing a freezing material; and

(d) storing the storage container containing the human oocytes which have undergone vitrification until the human oocytes are ready to devitrified,

wherein implantation or pregnancy rate of human oocytes after devitrification and *in vitro* fertilization is higher than implantation or pregnancy rate of human oocytes vitrified on a gold grid using liquid nitrogen.

7. (Cancelled)

8. (Cancelled)

9. (New) Vitrified human oocytes produced by the method according to claim

1.